Workshop on Energy Recovery Linacs (ERL2015)

June 7-12, 2013, Stony Brook University, Stony Brook, New York

ERL: RF/SRF Working Group charge

Hiroshi Sakai , KEK
Erk Jensen, CERN

The WG4 charge on Superconducting RF technology, RF and RF control is to identify the critical issues of each component in cryomodule construction, assembly works and beam operation for ERL. Especially, we need to evaluate what is the critical issues of SRF cryomodules for high current and high charge with low emittance beam operation. Following themes will be discussed in WG4.

- Recent status of SRF system of each lab for ERL R&D (SRF lab overview, cavity & module design and R&D)
- Cavity testing & module test (see the perforamance between vertical test & cryomodule, (string) assembly works & how to suppress field emission for mass production)
- HOM damping (HOM damper and coupler development for high current, HOM calculation)
- High Q R&D
- RF control for stable beam operation (michrophonics, RF source, LLRF, ITL)
- SRF Gun